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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,270	02/23/2001	Robert E. Rouquette	201673US20PC	6002
22850	7590	11/02/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			WANG, TED M	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/720,270	<b>Applicant(s)</b> ROUQUETTE, ROBERT E.	
	<b>Examiner</b> Ted M Wang	<b>Art Unit</b> 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 25-37, 49, 50, and 52/1 - 52/13 is/are pending in the application.
- 4a) Of the above claim(s) 14-24, 38-48, 51, and 52/14 - 52/24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 25-37, 49, 50, and 52/1 - 52/13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/3/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Election Requirement***

1. The response to Election Requirement filed on 8/20/2004 is acknowledged.  
Species 1 (claims 1-13, 25-37, 49, 50, and 52/1 – 52/13) has been elected.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

3. The drawings are objected to because
  - On Fig.13, an arrow sign "←" should be added between 1330 and 1335 and 1335 to 1340, respectively, to indicate the direction of the connectivity.
  - The drawing contents are overlapped by the sealed wordings such as SUBSTITUTE SHEET (RULE 260). A clean version of the drawings (Fig.1 – Fig.18) should be resubmitted.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
5. The disclosure is objected to because of the following informalities:
- On page 4, each individual figure (e.g. Fig.1A and Fig.1B) should be referred to in the brief description of the drawings.
  - On page 13, line10, "1740" should be inserted in between 1738 and 1742.

Appropriate correction is required.

***Claim Objections***

6. Claims 3, 8, 13, 27, 32, and 37 are objected to because of the following informalities:
- On claims 3 and 13 line 3, after sampling "a" should be changed to "the", and line 3, "K" and "M" have not been defined.
  - On claim 8 line 3, "K" and "M" have not been defined.
  - On claims 27 and 37 line 3, after sampling "a" should be changed to "the", and lines 3-4, "K" and "M" have not been defined.
  - On claim 32 lines 3-4, "K" and "M" have not been defined.
  - Applicant should properly review all of the claim language and correct them.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 1 recites the limitation " and storing in a memory frequencies corresponding to the identified narrow-band interference components " in claim 1 lines 7-8, and the limitation "said excised frequencies" in claim 1 line 13. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 8 recites the limitation " said generating coefficients step comprising ..." in claim 8 lines 3-11. There is insufficient antecedent basis for this limitation in the claim. The claim 8 does not clearly define how it relates to generating coefficient step of the claim 1.

11. Claim 10 recites the limitation " the method of claim 8, where: said generating coefficients step comprises, .... " in claim 8 lines 1-11. Claim 10 has repeated claim 8 limitation on lines 3-8.

12. Claim 25 recites the limitation " and to store in a memory frequencies corresponding to the identified narrow-band interference components" in claim 25 lines 8-9, and the limitation "said excised frequencies" in claim 25 line 14-15. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 32, which is an apparatus claim related to claim 8, has the same issue as claim 8.

14. Claim 34, which is an apparatus claim related to claim 8, has the same issue as claim 10.

15. Claim 49, which is a device claim related to claim 1, has the same issue as claim 1.

### ***Conclusion***

16. References US 5,999,561, US 5,271,038, US 5,852,630, Kohri, T. (Spread Spectrum Techniques and Applications, 994. IEEE ISSSTA '94, IEEE Third International Symposium on, 4-6 July 1994 Pages: 521 - 525 vol.2), and Laster et al. (Interference Rejection in Digital wireless communications, IEEE signal processing magazine, May 1997) are cited because they are put pertinent to the narrow band interference rejection in digital communication. However, none of references teach detailed connection as recited in claim.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M Wang whose telephone number is (571) 272-3053. The examiner can normally be reached on 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2634

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Ted M Wang  
Examiner  
Art Unit 2634

Ted M. Wang

A handwritten signature in cursive script, appearing to read "Shuwang Liu".

SHUWANG LIU  
PRIMARY EXAMINER